DIGITAL PROJECTION

USER MANUAL

INSTALLATION AND QUICK-START GUIDE
CONNECTION GUIDE
OPERATING GUIDE
REMOTE COMMUNICATIONS GUIDE

E-Vision 7000 Series

High Brightness Digital Video Projector

Rev C July 2014

112-457C

About This Document

Please follow the instructions in this manual carefully to ensure safe and long-lasting use of the projector.

Keep this manual handy for future reference.

Symbols used in this manual

Many pages in this document have a dedicated area for notes. The information in that area is accompanied by the following symbols:

ELECTRICAL WARNING: this symbol indicates that there is a danger of electrical shock unless the instructions are closely followed.

WARNING: this symbol indicates that there is a danger of physical injury to yourself and/or damage to the equipment unless the instructions are closely followed.

NOTE: this symbol indicates that there is some important information that you should read.

Product revision

Because we at Digital Projection continually strive to improve our products, we may change specifications and designs, and add new features without prior notice.

Legal notice

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Notes

Introduction

Congratulations on your purchase of this Digital Projection product.

Your projector has the following key features:

- Swappable color wheels for high brightness and color critical applications.
- BrilliantColor™ for increased system brightness.
- DynamicBlack™ for improved black levels in dark scenes.
- Frame sequential 3D support at up to 120Hz with support for DLP® Link™ glasses synchronisation only.
- Independent control of hue, saturation and gain for primary and secondary colors.
- Vertical keystone correction.
- Control via LAN and RS232.
- Motorized lens mount.

A serial number is located on the back of the projector. Please record it here:

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E-Vision 7000 Series

High Brightness Digital Video Projector

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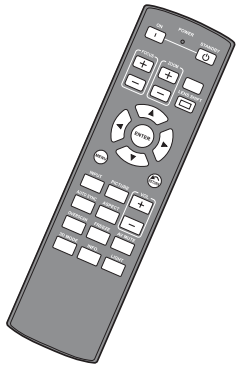
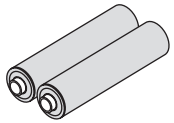
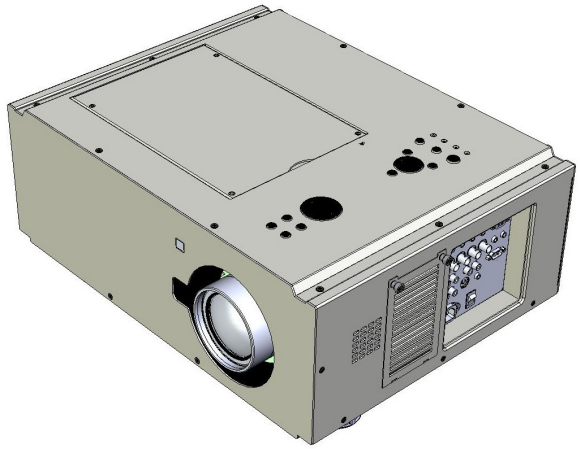
What's In The Box?



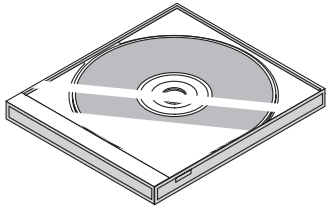
Remote control (112-377)



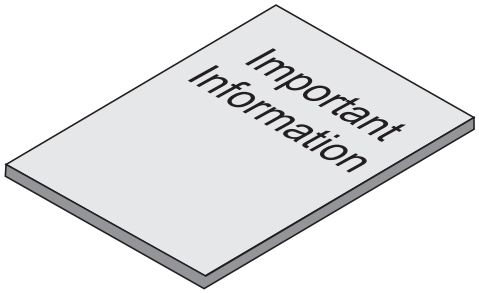
2x AAA batteries



Projector

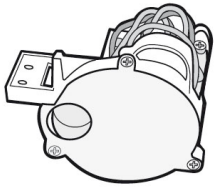


User Manual on disc (115-759)

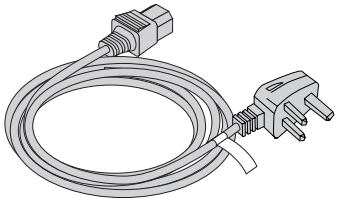


Important Information (112-462)

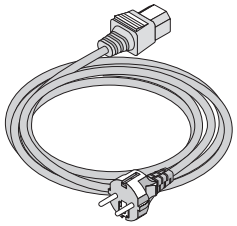
Lens cap



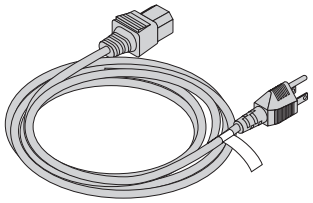
Color wheel



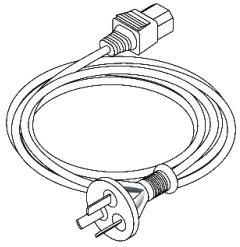
Power cable 10A, United Kingdom (102-180)



Power cable 10A, Europe (102-163)



Power cable 13A, North America (102-165)



Power cable, China (112-472)

Notes

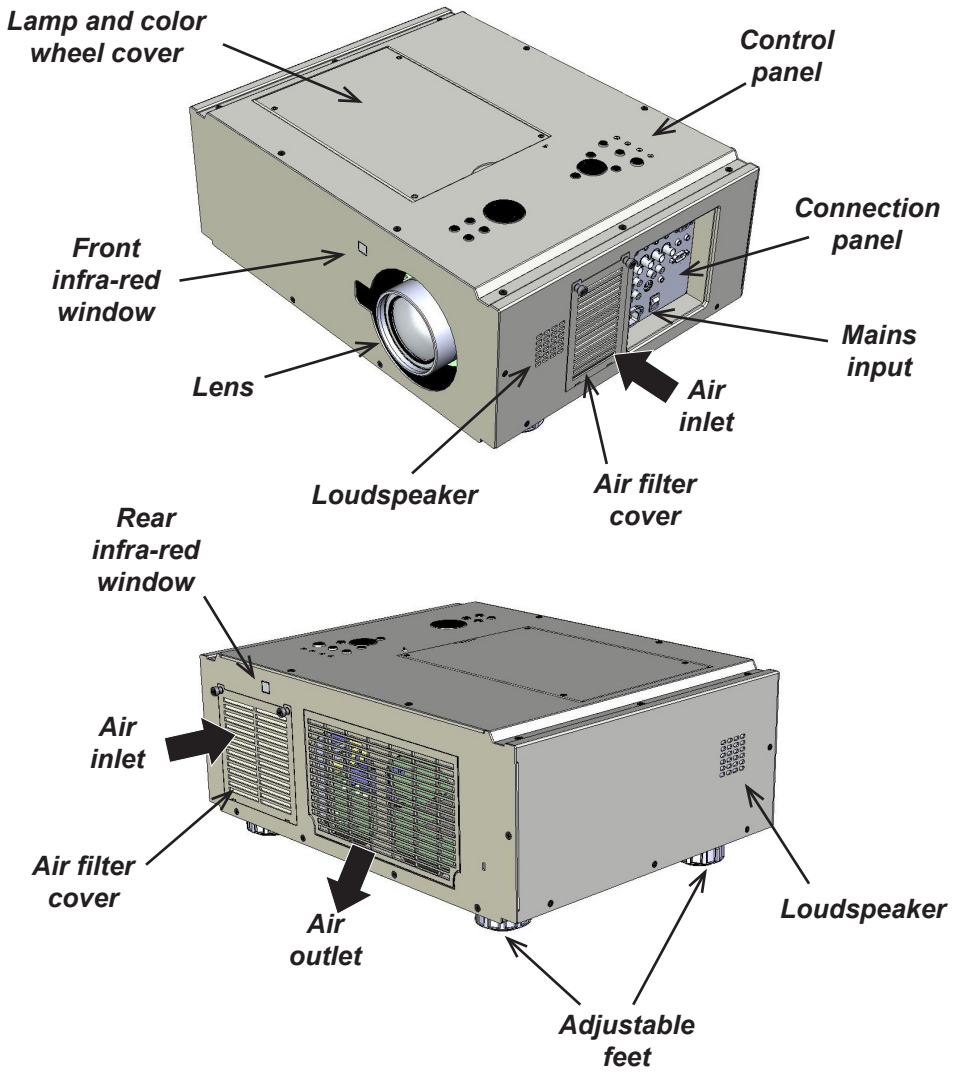
Make sure your box contains everything listed. If any pieces are missing, contact your dealer.

You should save the original box and packing materials, in case you ever need to ship your Projector.

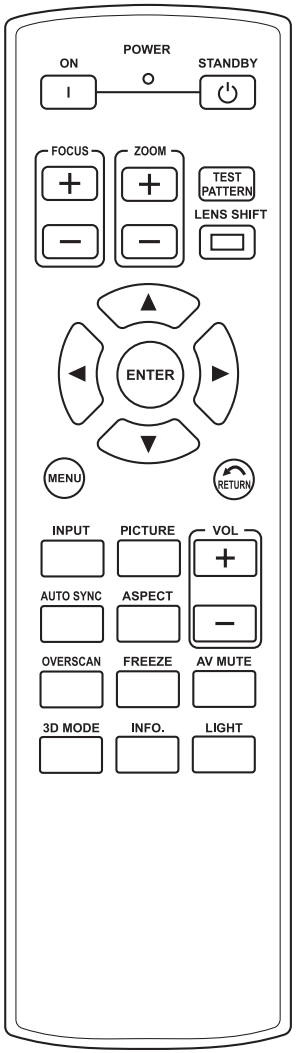
Only one power cable - dependent on the destination territory - will be supplied with the projector.

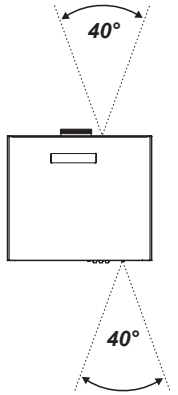
Getting To Know The Projector

Front and rear views



Remote control





Infra-red reception

Notes

- *The projector uses an infra-red remote control.*

  Some of the controls are duplicated on the projector control panel, as shown on the next page.

- *For full details of how to use the controls and the menu system, see the **Operating Guide**.*

- *The air filters should be cleaned or changed regularly, depending on the installation environment.*

  The filters should be changed at the same time as the lamp is changed.

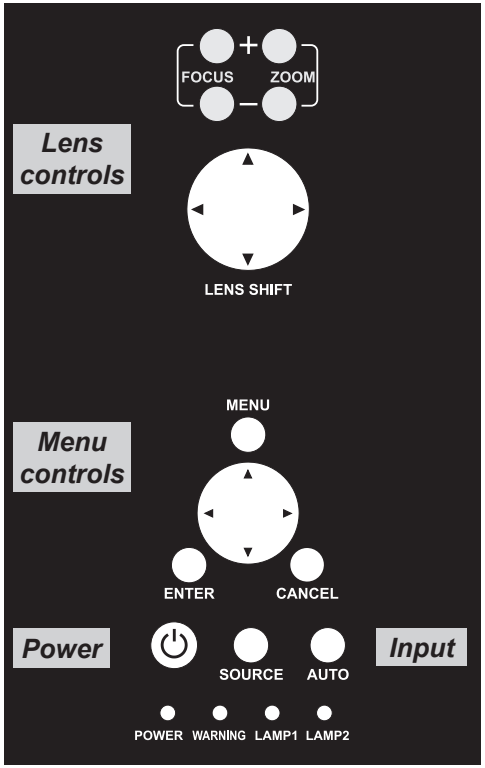
- *The projector lens is shipped separately.*

Control panel and indicators

Some of the controls from the remote control are duplicated on the projector control panel, as shown on the right.

The **CANCEL** *button has the same function as the* **RETURN** *button on the remote control.*

The **SOURCE** *and* **AUTO** *buttons have the same function as the* **INPUT** *and* **AUTO SYNC** *buttons on the remote control.*

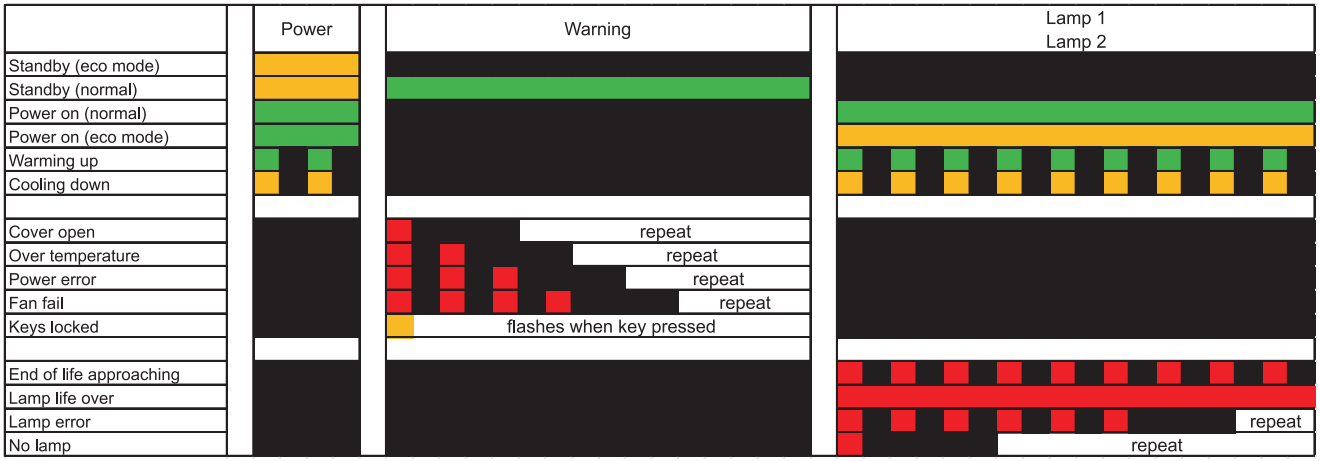


The ***Power*** indicator will show amber when in standby and green when the projector is on, and will flash when the projector is warming up or cooling down.

The ***Warning*** indicator will flash to show any error situations.

The ***Lamp*** indicators will show which lamp is in use, and whether the projector is in Normal or Eco mode, and will flash to show lamp status.

The chart below shows all possible combinations of indicator lamp color.



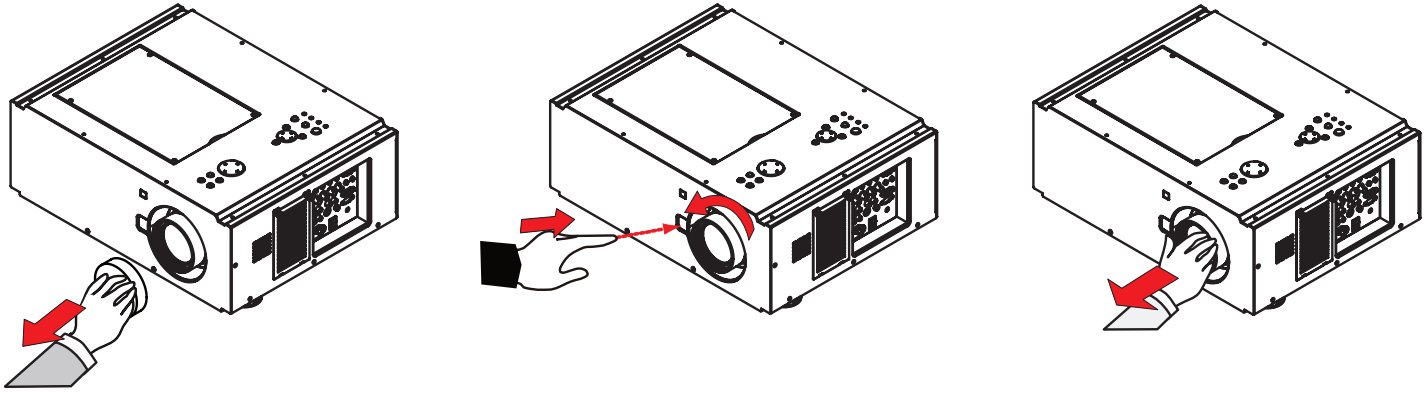
Notes

For full details of how to use the controls and the menu system, see the ***Operating Guide****.*

Changing The Lens, Lamps And Color Wheel

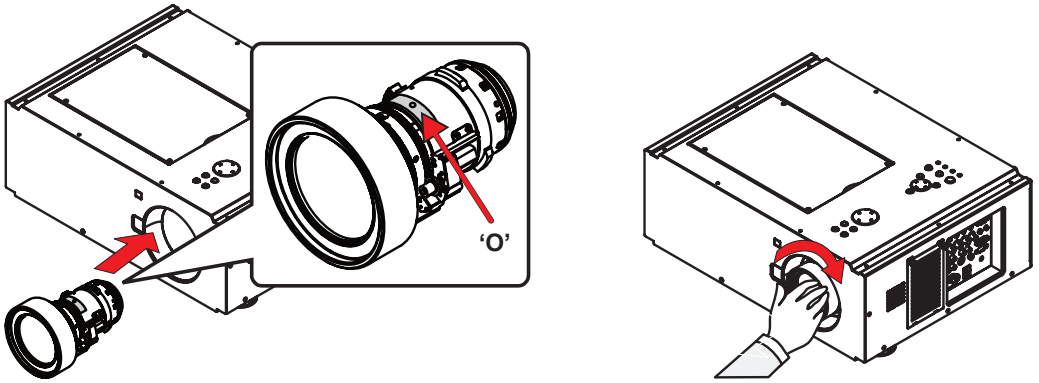
Removing the lens

- Remove the lens cap.
- Push in the lens release lever, and turn the lens anti-clockwise.
- Remove the lens.



Fitting the lens

- Position the lens so that the label marked ‘O’ is at the top, and gently insert it all the way into the lens mount.
- Turn the lens clockwise until it clicks into place.



Notes

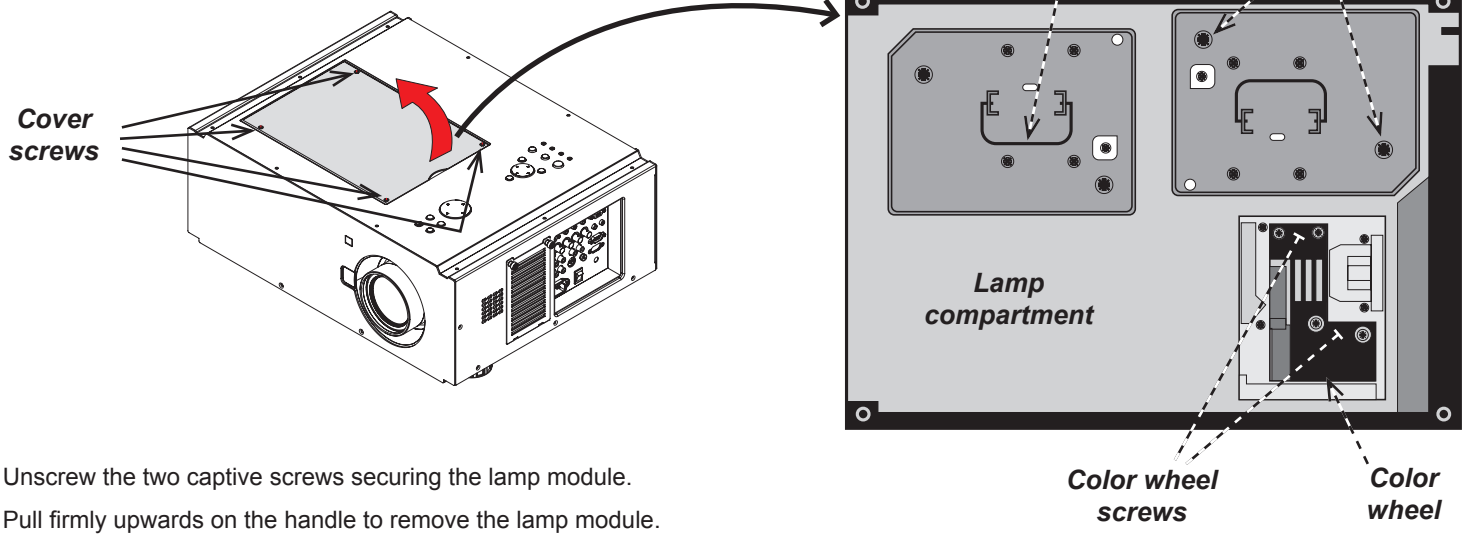
Always allow the lamp to cool for 5 minutes before:

- disconnecting the power
- moving the projector

The projector lens is shipped separately.

Changing the lamp

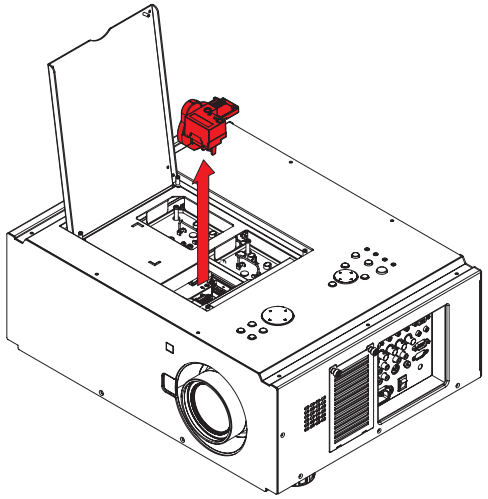
- Remove the four screws securing the lamp compartment cover.
- Open the lamp compartment.



- Unscrew the two captive screws securing the lamp module.
- Pull firmly upwards on the handle to remove the lamp module.
- Insert a new lamp module, fasten the screws, and replace the lamp compartment cover.

Changing the color wheel

- Remove the four screws securing the lamp compartment cover.
- Open the lamp compartment.
- Unscrew the four captive screws securing the color wheel.
- Remove the color wheel.
- Insert a new color wheel, fasten the screws, and replace the lamp compartment cover.



Notes

Always allow the lamp to cool for 5 minutes before:

- disconnecting the power
- moving the projector

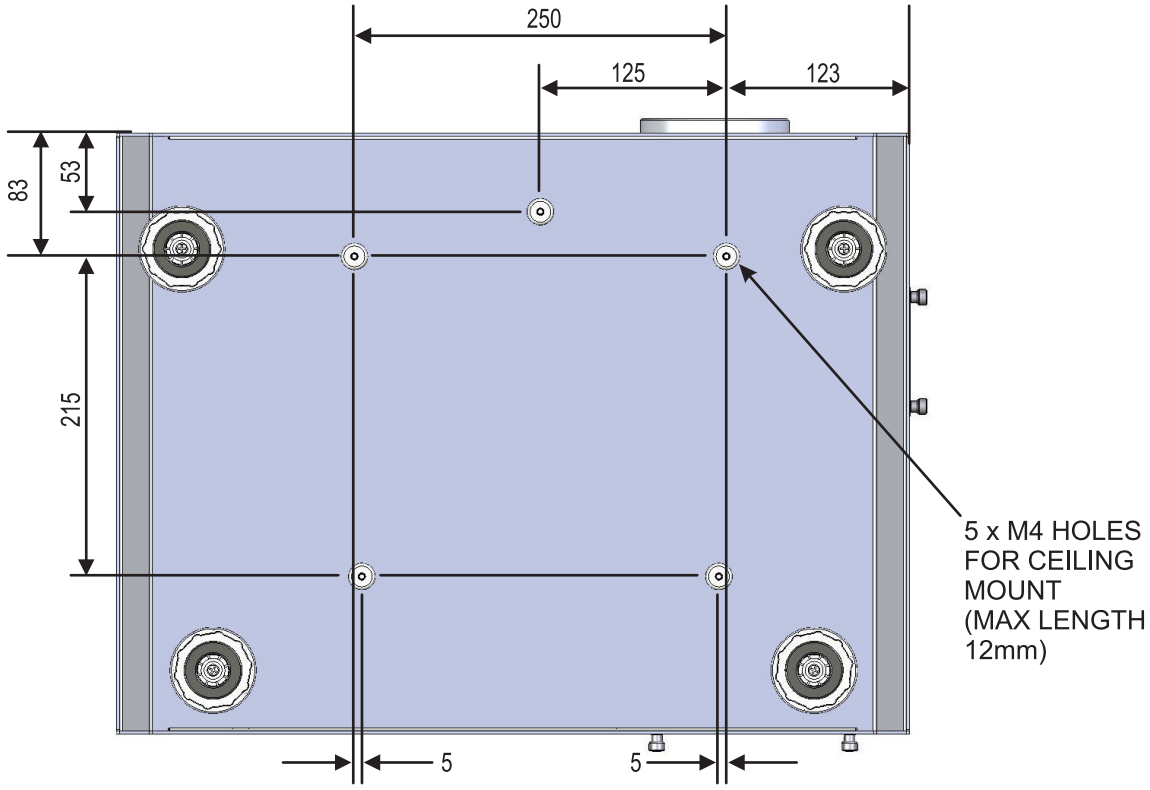
The lamp and color wheel must be changed only by suitably qualified personnel.

The projector will shut down if the cover is opened whilst in operation.

The filters should be changed at the same time as the lamp is changed.

Positioning The Screen And Projector

- Install the screen, ensuring that it is in the best position for viewing by your audience.
- Mount the projector, ensuring that it is at a suitable distance from the screen for the image to fill the screen. Set the adjustable feet so that the projector is level, and perpendicular to the screen.
- The dimension drawing below shows the positions of the feet for table mounting, and the fixing holes for ceiling mounting.



All dimensions are in mm.

Notes

Always allow the lamp to cool for 5 minutes before:

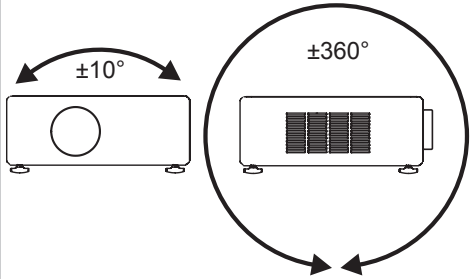
- disconnecting the power
- moving the projector

Ensure that there is at least 50cm (20in) of space between the ventilation outlets and any wall, and 10cm (4in) on all other sides.

If ceiling mounting, ensure there is 30cm (12in) of space between the projector and ceiling.

Do not stack the projectors.

Do not tilt the projector more than ±10° from side to side when in use, as this may cause serious lamp failure, damage the lamp module and cause extra cost on replacement.



Operating The Projector

Switching the projector on

- Connect the power cable between the mains supply and the projector. Switch on at the switch next to the power connector.
- Wait until the self-test has completed and the ***Power*** indicator on the projector control panel shows amber. The lamp will be off and the projector will be in ***STANDBY*** mode.
- Press ⏻ on the control panel or **POWER ON** on the remote control.

  The ***Power*** indicator on the control panel will flash green for a few seconds whilst the lamp comes up to full brightness. When the projector is ready for use, the ***Power*** indicator will show steady green.

Selecting an input signal or test pattern

Input signal

- Connect an image source to the projector. The signal should be automatically detected by the projector, and should be displayed within a two or three seconds.
- If more than one signal is connected, then select the image you want to display:

  Press **SOURCE** on the control panel to cycle through the inputs,

  or press **INPUT** on the remote control, then ◁ or ▷ to cycle through the inputs.

Test pattern

If you have no image source connected to the projector, then you can display a test pattern instead:

Press **TEST PATTERN** on the remote control, then ◁ or ▷ to cycle through the patterns,

or select a **Test Pattern** from the **Installation menu**.

Notes

⚠ **Always allow the lamp to cool for 5 minutes before:**

- disconnecting the power
- moving the projector

☞ *For full details of how to connect an image source to the projector, see the **Connection Guide**.*

☞ *For full details of how to use the controls and the menu system, see the **Operating Guide**.*

Adjusting the lens

Zoom

- Use the **ZOOM +/–** buttons on the control panel or on the remote control to adjust the lens so that the image fills the screen.

Focus

- Use the **FOCUS +/–** buttons on the control panel or on the remote control to adjust the lens until the image is sharp.

Shift

- Use the **LENS SHIFT** buttons ◁, ▷, △ and ▽ on the control panel to adjust the position of the image,

  or press the **LENS SHIFT** button on the remote control then use ◁, ▷, △ and ▽ to adjust the position of the image.

Adjusting the image

Orientation

- Use the **Projection Mode** settings, in the **Installation Menu**.

Aspect ratio

- Press the **ASPECT** button on the remote control to cycle through all the available settings.

  or use the **Aspect Ratio** setting in the **Setup Menu**.

Picture

- Press **PICTURE** on the remote control or use the menu controls, to open the **Picture Menu**.

  Use the sliders in the **Picture** menu to adjust the brightness, contract etc.

Notes

*For full details of how to use the controls and the menu system, see the **Operating Guide**.*

Switching the projector off

- Press ⏻ on the control panel or **STANDBY** on the remote control, then press the button a second time within 5 seconds to confirm your intention to switch off.

  The lamp will go off, and the ***Power*** indicator on the control panel will flash amber for a few seconds whilst the lamp cools. The ***Power*** indicator on the control panel will then show amber and the projector will be in ***Standby*** mode.

- Switch off at the switch next to the power connector. Disconnect the power cable from the projector.

Notes

⚠ **Always allow the lamp to cool for 5 minutes before:**

- disconnecting the power
- moving the projector

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DIGITAL PROJECTION

CONNECTION GUIDE

E-Vision 7000 Series

High Brightness Digital Video Projector

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Signal Inputs And Outputs

Computer 1

- Connect an ***analog computer (VGA)*** cable to the 15-pin D-type.
- Connect a ***stereo audio*** cable to the 3.5mm jack.

Computer 2

- Connect a set of ***RGsB***, ***RGBHV*** or ***YCbCr*** cables to the BNC connectors.
- Connect a ***stereo audio*** cable to the 3.5mm jack.

Computer 3

- Connect a ***DVI-I*** cable to the DVI connector.
- Connect a ***stereo audio*** cable to the 3.5mm jack below the DVI connector.

Component

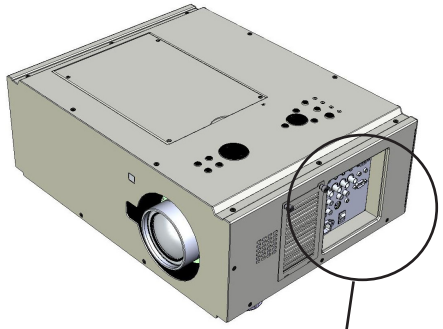
- Connect a set of ***YPbPr*** or ***YCbCr*** cables to the RCA phono connectors.
- Connect a pair of ***audio cables*** to the ***L*** and ***R*** audio connectors or a single audio cable to the ***L*** connector.

Video or S-Video

- Connect a ***composite video*** cable to the single RCA phono connector, or an ***S-Video*** cable to the 4-pin mini-DIN.
- Connect a pair of ***audio cables*** to the ***L*** and ***R*** audio connectors or a single audio cable to the ***L*** connector.

Monitor Out

- Connect an ***analog monitor (VGA)*** cable to the 15-pin D-type.
- Connect a ***stereo audio*** cable to the 3.5mm jack.

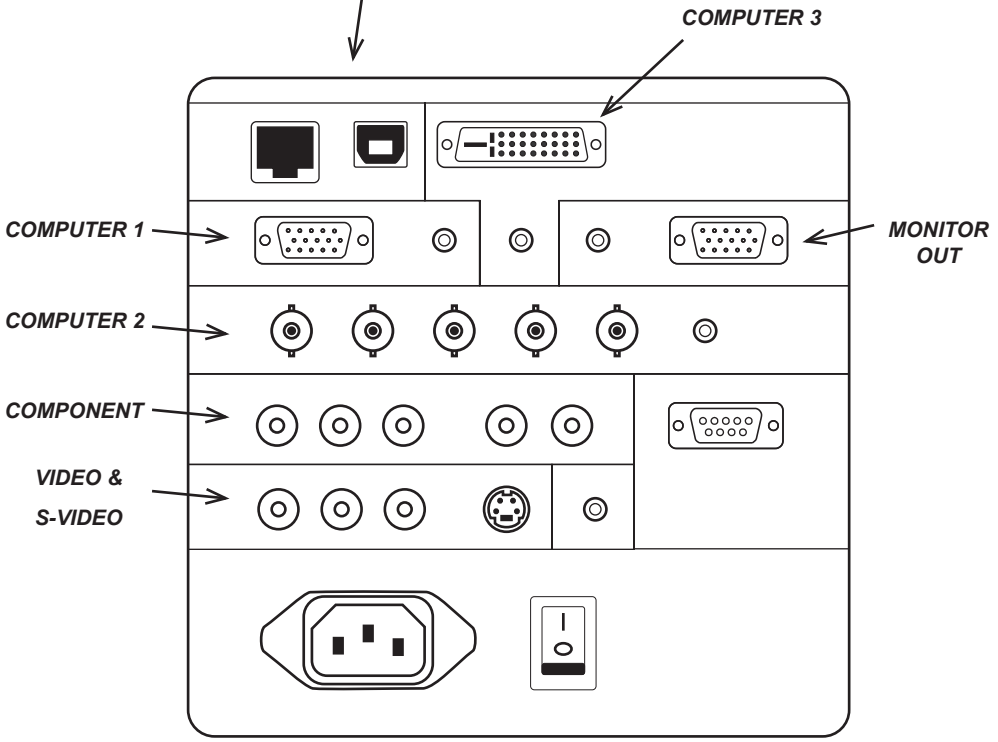


Notes

*For a complete listing of pin configurations for all signal and control connectors, see **Wiring Details** later in this Guide.*

*When Standby Mode is set to **Eco**:*

*the **Monitor Out** connection is disabled.*



Supported Signal Input Modes

Signal		Resolution	Refresh Rate (Hz)	Total number of lines	Horizontal Frequency (kHz)	3D	VIDEO / S-VIDEO	COMPONENT	COMPUTER 1 (VGA)	COMPUTER 2 (RGB/YCbCr)	COMPUTER 3 (DVI-I)
SDTV	480i	720 x 480	59.94	525	15.73		✓	✓		✓	
	576i	720 x 576	50	625	15.63		✓	✓		✓	
HDTV	480p	720 x 480	59.94	525	31.47			✓		✓	✓
	576p	720 x 576	50	625	31.25			✓		✓	✓
	720p50	1280 x 720	50	750	37.50			✓		✓	✓
	720p60	1280 x 720	60	750	45.00			✓		✓	✓
	1080i50	1920 x 1080	50	1125	28.13			✓		✓	✓
	1080i60	1920 x 1080	60	1125	33.75			✓		✓	✓
	1080p50	1920 x 1080	50	1125	56.25			✓		✓	✓
	1080p60	1920 x 1080	60	1125	67.5			✓		✓	✓
COMPUTER	480p	640 x 480	59.9	526	31.5				✓	✓	✓
	VGA72	640 x 480	72.8	521	37.9				✓	✓	✓
	VGA75	640 x 480	75	500	37.5				✓	✓	✓
	VGA85	640 x 480	85	509	43.3				✓	✓	✓
	SVGA56	800 x 600	56.3	625	35.2				✓	✓	✓
	SVGA60	800 x 600	60.3	629	37.9	✓			✓	✓	✓
	SVGA72	800 x 600	72.2	666	48.1				✓	✓	✓
	SVGA75	800 x 600	75	625	46.9				✓	✓	✓
	SVGA85	800 x 600	85.1	631	53.7				✓	✓	✓
	SVGA120	800 x 600	120.6	663	80.0	✓					✓
	SVGA120	800 x 600_RB	120	611	73.3	✓					✓
	SVGA120	800 x 600	119.9	700	83.9	✓					✓
	XGA60	1024 x 768	60	807	48.4	✓			✓	✓	✓
	XGA70	1024 x 768	70.1	806	56.5				✓	✓	✓
	XGA75	1024 x 768	75	800	60				✓	✓	✓
	XGA120	1024 x 768	120	806	96.7	✓					✓
	XGA120	1024 x 768_RB	120	813	97.6	✓					✓
	XGA120	1024 x 768	119.8	823	98.6	✓					✓

continued on next page...

...continued from previous page

Signal		Resolution	Refresh Rate (Hz)	Total number of lines	Horizontal Frequency (kHz)	3D	VIDEO / S-VIDEO	COMPONENT	COMPUTER 1 (VGA)	COMPUTER 2 (RGB/YCbCr)	COMPUTER 3 (DVI-I)
COMPUTER *continued*	WXGA60	1280 x 720	59.9	746	44.7	✓			✓	✓	✓
	WXGA60	1280 x 720	60	750	45				✓	✓	✓
	WXGA120	1280 x 720	120	750	90						✓
	WXGA120	1280 x 720	120.1	772	92.7	✓					✓
	WXGA60	1280 x 768	59.9	798	47.8				✓	✓	✓
	WXGA60	1280 x 800	59.8	831	49.7	✓			✓	✓	✓
	WXGA75	1280 x 800	74.9	838	62.8				✓	✓	✓
	WXGA120	1280 x 800_RB	119.9	847	101.6	✓					✓
	WXGA60	1360 x 768	60	795	47.7				✓	✓	✓
	WXGA60	1366 x 768	59.8	799	47.8				✓	✓	✓
	WXGA+60	1440 x 900	59.9	933	55.9				✓	✓	✓
	SXGA75	1152 x 864	75	900	67.5				✓	✓	✓
	SXGA60	1280 x 960	60	1000	60				✓	✓	✓
	SXGA60	1280 x 1024	60	1067	64				✓	✓	✓
	SXGA75	1280 x 1024	75	1067	80				✓	✓	✓
	SXGA+60	1400 x 1050	60	1088	65.3				✓	✓	✓
	WSXGA+	1680 x 1050_60	60	1088	65.3				✓	✓	✓
	UXGA60	1600 x 1200	60	1250	75.00				✓	✓	✓
MAC	MAC13	640 x 480	66.6	526	35.0				✓	✓	✓
	MAC16	832 x 624	74.5	667	49.7				✓	✓	✓
	MAC19	1024 x 768	74.9	804	60.2				✓	✓	✓
	MAC21	1152 x 870	75.1	915	68.7				✓	✓	✓

Control Connections

Screen Trigger

- The Trigger output can be connected to an electrically operated screen, automatically deploying the screen when the projector is switched on, and retracting the screen when the projector is switched to standby.

USB Service Port

- The USB Service Port is used to download firmware updates, issued from time to time by Digital Projection.

RS232

- All of the projector's features can be controlled via a serial connection, using the control strings described in the ***Remote Communications Guide***.

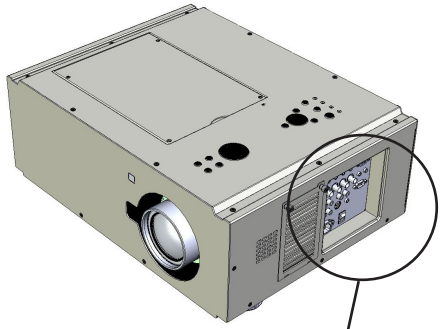
LAN

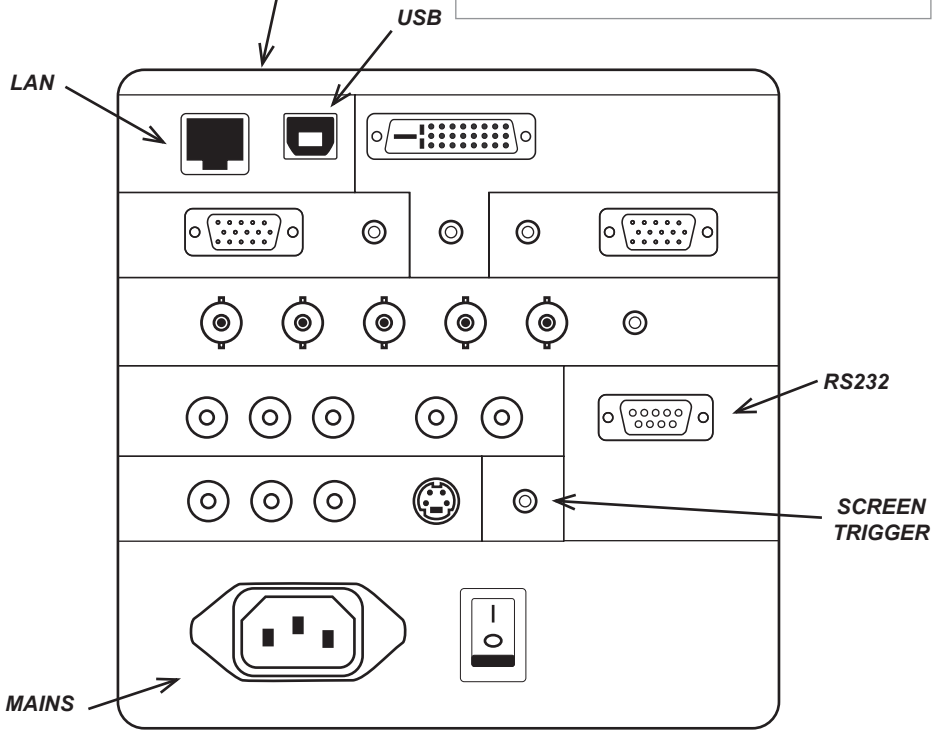
- All of the projector's features can be controlled via a LAN connection, using the industry standard ***PJLink*** commands. The PJLink specification can be downloaded from ***http://pjlink.jbmia.or.jp/english*** - click on the ***Specifications*** link.
- The LAN IP Address of the projector can be set by using the ***Network*** submenu, which can be found in the ***Advanced Setting*** submenu in the ***Installation*** menu.
- Once the LAN IP Address has been set, it is possible to assign a ***Host Name*** and ***Domain Name*** to the projector, and to set up an ***Alert Mail*** address and ***PJLink*** password.

*For more information about these settings, see **PJLink** in the **Remote Communications Guide**.*

- A number of basic picture and input settings can be controlled directly using the embedded ***LAN Control utility***.

*For full details of how to use this feature, see **LAN Control Utility** in the **Remote Communications Guide**.*





Notes

*For a complete listing of pin configurations for all signal and control connectors, see **Wiring Details** later in this Guide.*

*Only one remote connection can be used at any one time. For more information, see the **Installation menu** in the **Operating Guide**.*

*For full details of how to use the menu system, see the **Operating Guide**.*

*When Standby Mode is set to **Eco**:*

*the **RS232** connection is disabled.*

Wiring Details

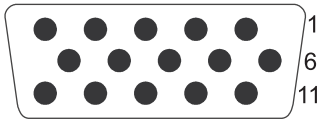
Signal inputs and outputs

Monitor video output (VGA)

Computer 1 video input: analog computer (VGA)

15 way D-type connector

1	R
2	G
3	B
4	unused
5	Digital Ground (H Sync)
6	R Ground
7	B Ground
8	G Ground
9	+5v
10	Digital Ground (V Sync/DDC)
11	unused
12	SDA
13	H Sync
14	V Sync
15	SCL

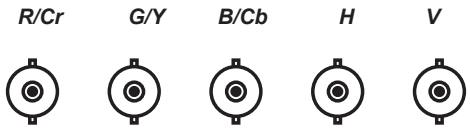


pin view of female connector

Computer 2 video input: RGBHV, RGsB or YCbCr

5 x 75 ohm BNC

RGBHV	RGsB	YCbCr
Green	Green + Sync	Y
Blue	Blue	Cb
Red	Red	Cr
Hsync		
Vsync		



Notes

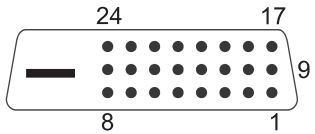
*For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.*

For details of the audio connections associated with these video connections, see later in this section.

Computer 3 video input: DVI-D

24 way D-type connector

1	TMDS Data 2-
2	TMDS Data 2+
3	TMDS Data 2 Shield
4	unused
5	unused
6	DDC Clock
7	DDC Data
8	unused
9	TMDS Data 1-
10	TMDS Data 1+
11	TMDS Data 1 Shield
12	unused
13	unused
14	+5 V Power
15	Ground
16	Hot Plug Detect*
17	TMDS Data 0-
18	TMDS Data 0+
19	TMDS Data 0 Shield
20	unused
21	unused
22	TMDS Clock Shield
23	TMDS Clock+
24	TMDS Clock-



pin view of female connector

* Hot plug detect (HPD) is fully DVI compliant. DVI sources detect the presence of a display device by providing +5V on pin 14 and looking for +5V on pin 16. Whenever the projector is operational, and 5V is present on pin 14, pin 16 will be held at +5V.

EDID is available even when the projector is switched off.

Operational means that the projector is powered up. Non operational states are powered down and some self test and reprogramming modes.

High Definition Content Protection (HDCP) is supported on this input.

Notes

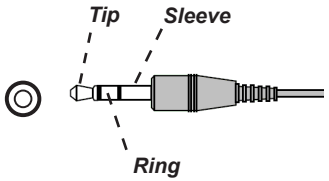
*For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.*

Monitor audio output

Computer 1, 2, 3 audio inputs

3.5mm mini jack

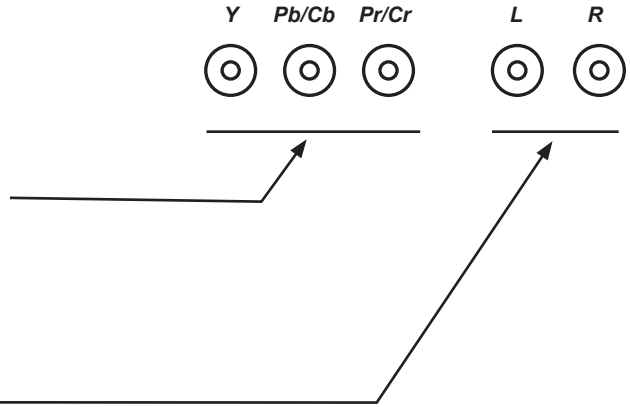
Tip	Left
Ring	Right
Sleeve	Ground



Component video and audio input

3 x RCA Phono

YCbCr	**YPbPr**
Cr	Pr
Y	Y
Cb	Pb



2 x *RCA Phono*

Left or Mono audio

Right audio

Notes

*For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.*

Video input

1 x RCA Phono

Composite Video

Composite and S-Video audio input

2 x *RCA Phono*

Left or Mono audio

Right audio

S-Video input

4 pin mini-DIN

1	Y Ground
2	C Ground
3	Luminance (Y)
4	Chrominance (C)

pin view of female connector

Notes

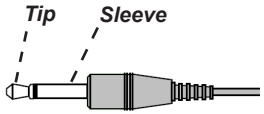
*For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.*

Control connections

Screen Trigger output

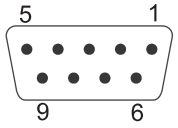
3.5mm mini jack

Tip	Signal
Sleeve	Ground



RS232 Serial control input

1	unused
2	Received Data (RX)
3	Transmitted Data (TX)
4	unused
5	Signal Ground
6	unused
7	unused
8	unused
9	unused



pin view of female connector

Null-modem cable

(used to connect the projector to a computer)

RX	2	---	3	TX
TX	3	---	2	RX
GND	5	---	5	GND

Notes

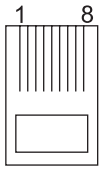
*Only one remote connection can be used at any one time. For more information, see the **Installation menu** in the **Operating Guide**.*

The projector is a DTE, so use:

a straight cable to connect to a modem, or

a null-modem cable as shown here to connect to another DTE such as a computer.

LAN connection



top view of cable connector (clip is underneath)

10BaseT Unshielded Twisted Pair cable

The standard wire colors are as follows:

1	White / Orange stripe
2	Orange
3	White / Green stripe
4	Blue
5	White / Blue stripe
6	Green
7	White / Brown stripe
8	Brown

Crossed cable

(used to connect directly to a computer with no hub or network.)
(Note that only the green and orange pairs are crossed)

1	White / Orange stripe	White / Green stripe	1
2	Orange	Green	2
3	White / Green stripe	White / Orange stripe	3
4	Blue	Blue	4
5	White / Blue stripe	White / Blue stripe	5
6	Green	Orange	6
7	White / Brown stripe	White / Brown stripe	7
8	Brown	Brown	8

Notes

*Only one remote connection can be used at any one time. For more information, see the **Installation menu** in the **Operating Guide**.*

For information about how to set the LAN IP configuration, see the next page.

Use:

a straight cable to connect to a hub or network, or

a crossed cable as shown here to connect ONLY to a computer directly.

DIGITAL PROJECTION

OPERATING GUIDE

E-Vision 7000 Series

High Brightness Digital Video Projector

Rev C July 2014

112-460C

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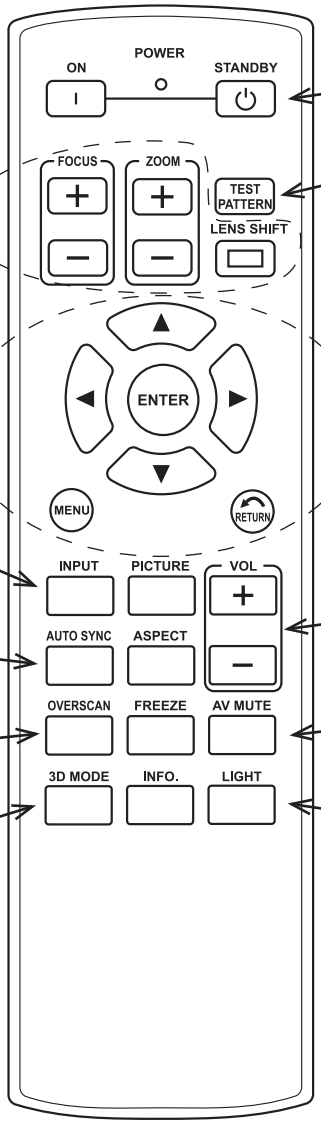
Using The Remote Control



LENS controls

POWER controls

TEST PATTERN: ***select from a list of available test patterns***

MENU controls

INPUT: ***select from the available video input signals***

PICTURE: ***opens the Picture menu***

AUTO SYNC: ***Projector will re-synchronise with the current input signal***

ASPECT: ***select from a list of available aspect ratios***

AUDIO VOLUME controls

OVERSCAN: ***select from On or Off***

FREEZE: ***freeze the current image frame***

AV MUTE: *switches both the video and sound On or Off*

3D MODE: ***opens the 3D Mode menu***

INFO: ***opens the Information menu***

LIGHT: *illuminates the buttons on the remote control for 10 seconds*

Notes

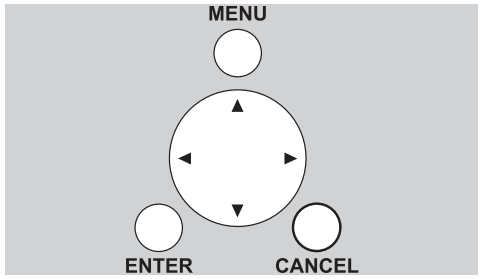
Some options and controls may not be available due to settings in the menus.

For full details of how to use the menu system, see later in this guide.

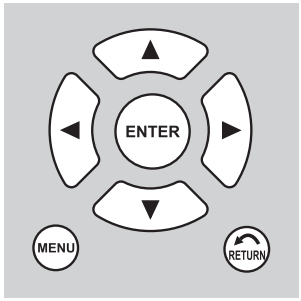
Using The Menus

Use the buttons on the projector control panel or on the remote control, to access the menu system.

- To open or close the on-screen display (OSD), press **MENU**.



Projector control panel

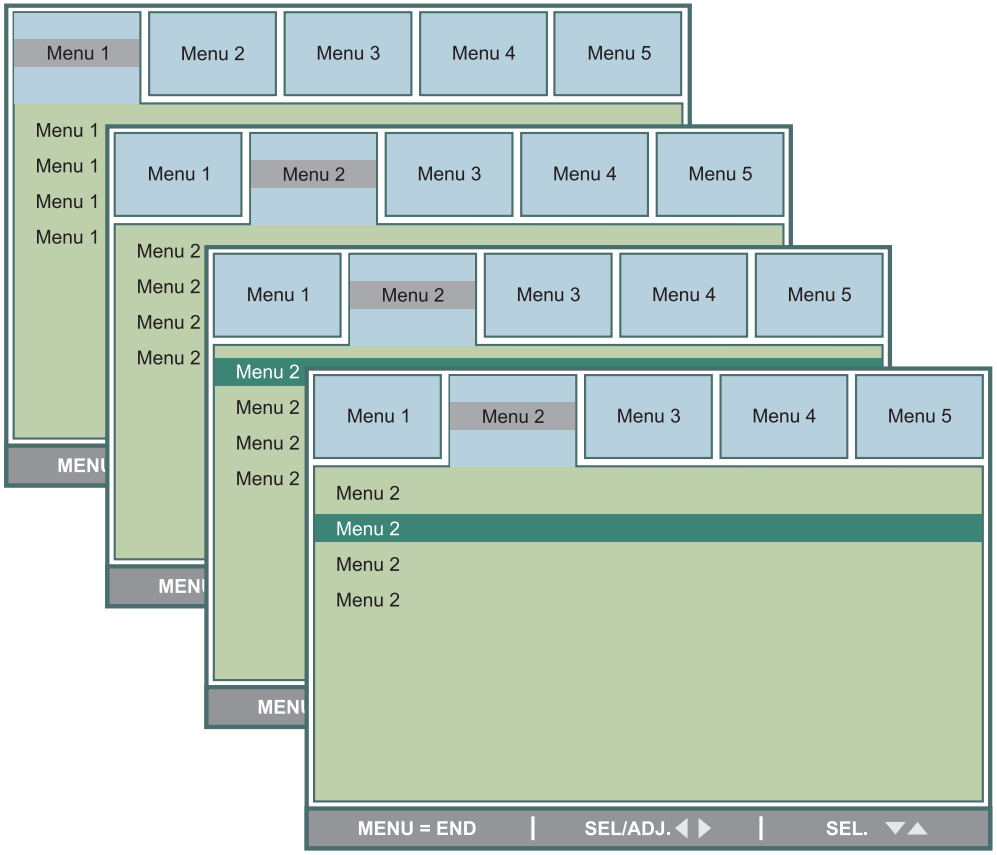


Remote control

Navigating the menus

- Select a menu using ◁ and ▷,
- then open the menu by pressing ▽.

  The first item in the menu is highlighted.



- Select an item in the menu using △ and ▽.

- To open another menu, first close the current menu by pressing **CANCEL/ RETURN**.

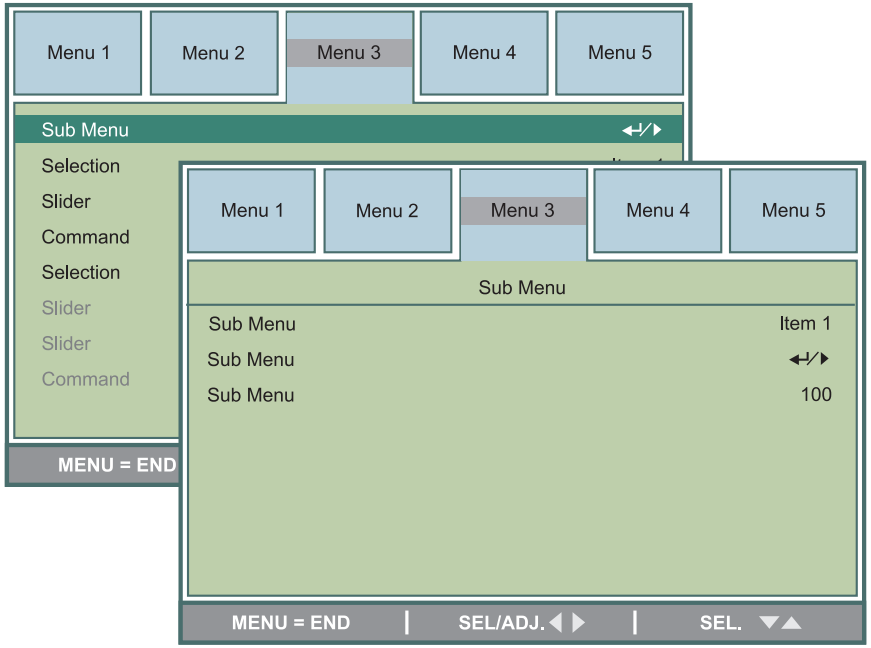
Notes

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Submenus

- Select a submenu using △ and ▽.
- then open the submenu by pressing **ENTER**.

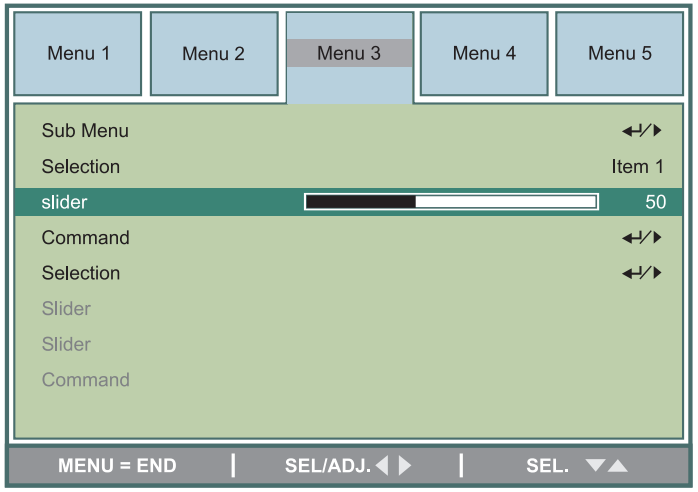
  The name of the submenu is shown at the top of the menu.



- To close the submenu, press **CANCEL/ RETURN**.

Sliders

- Use ◁ or ▷ to adjust the value.



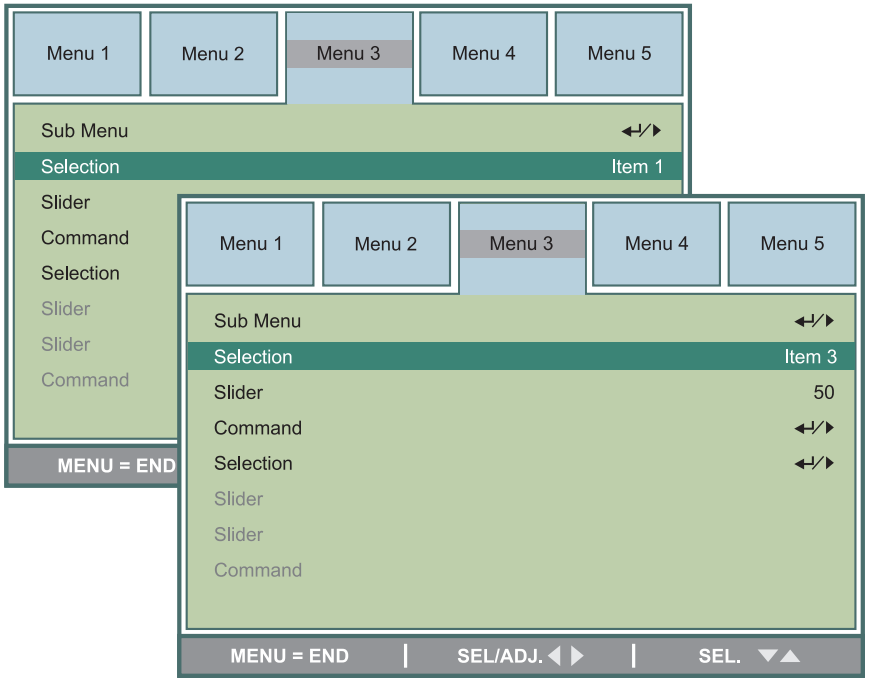
Notes

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Selecting parameters

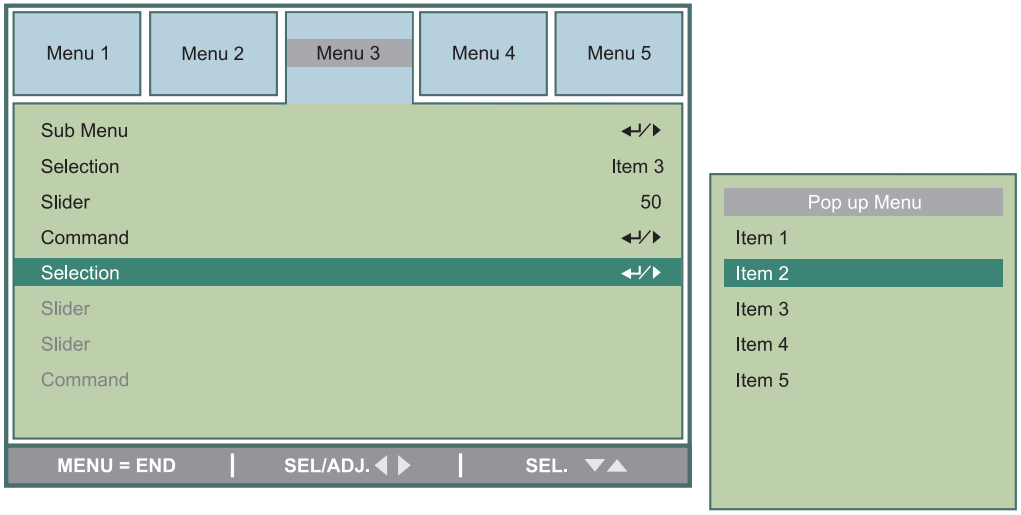
Most parameters are changed by selecting from a list:

- Select from the list using ◁ and ▷.
- The change will be made immediately.



Some parameters are changed by selecting from a pop-up menu.

- Press **ENTER** to open the pop-up menu.
- The item that is currently selected is highlighted.
- Select from the list using △ and ▽.
- The change will be made when you press **ENTER** to confirm the selection.

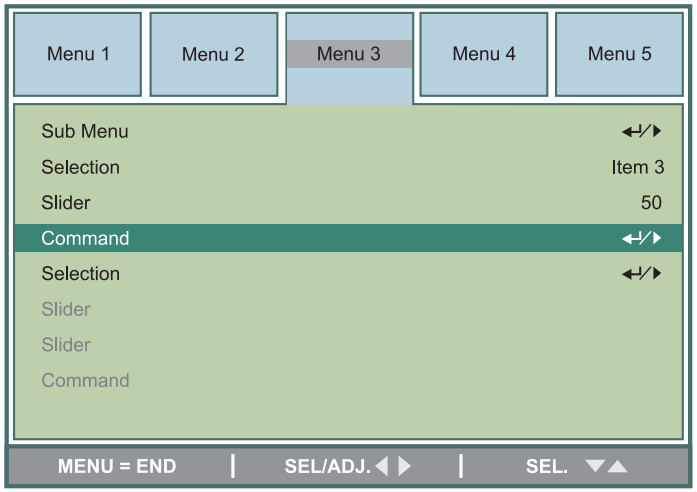


Notes

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Commands

- To use a command, press **ENTER**.



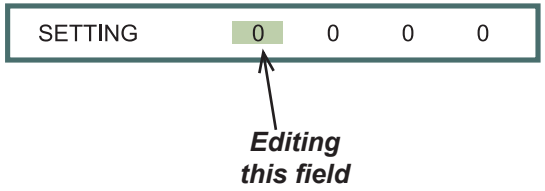
In this example,

- use ◁ or ▷ to move the **green** highlight to **No** or **Yes**,
- then press **ENTER** to confirm your selection.

Editing fields

Some features require a text or numeric field to be edited.

- To edit a field, first use ◁ or ▷ to select the field to be changed,
- then use △ and ▽ to adjust it the value.
- then select the next digit or character.
- Press **ENTER** to accept the new value or **CANCEL/RETURN** to exit without changing.

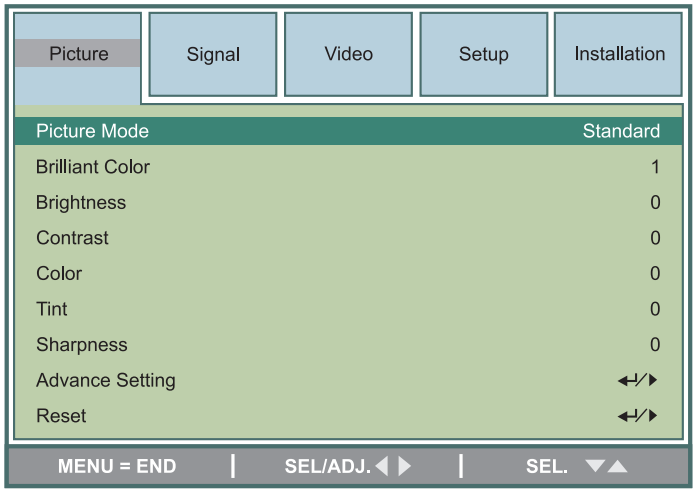


Notes

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

A Tour Of The Menus

Picture menu



Picture Mode

- Select a picture mode as required.

Brilliant Color

- Select 0, 1 or 2, as required.

Brightness, Contrast, Color, Tint, Sharpness

- Adjust the sliders for these settings, as required.

Reset

- Press **ENTER** to restore all settings in the Picture Menu (except Picture Mode and Signal Type) to their factory defaults.
- When the warning message appears, use ◁ or ▷ to move the green highlight to **YES** or **NO**, then press **ENTER** to confirm your selection.

Notes

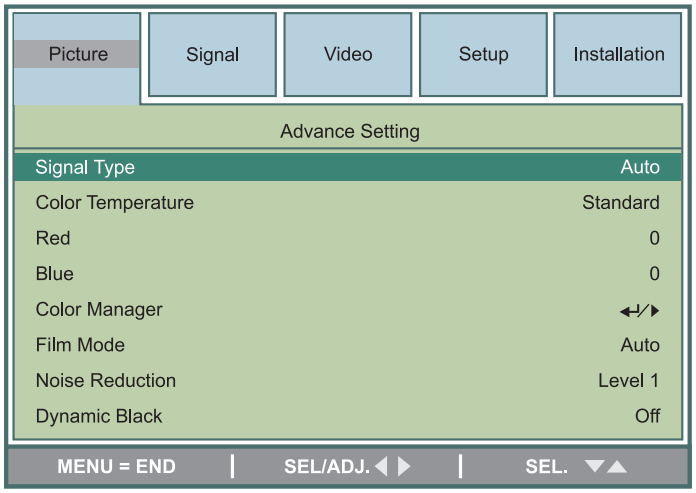
*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

***Brilliant Color**® allows for increased projector brightness and improved color saturation by enabling the yellow segments on the color wheel.*

Do NOT do this unless you are sure that you want to restore ALL the picture settings to their factory defaults.

Picture menu *continued*

Advance Setting submenu



Signal Type

- Set this to **Auto**, except when the projector has problems selecting between **RGB**, **YCrCb** and **YPrPb**.

Color Temperature

- Set this to suit the specification of the input source, or to improve the appearance of the projected image.

Red, Blue

- Set these to improve the appearance of the projected image.

Color Manager

- Press **ENTER** to open the Color Manager sub-menu.
- Select from Red, Green, Blue, Cyan, Magenta or Yellow and press **ENTER**.
- Use the sliders to adjust the **Hue**, **Saturation** and **Value** of each color as required.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Picture Menu
Advance Setting Submenu

Increasing the Red content will make the image feel 'warmer', Blue will make it feel 'colder'.

Picture menu, Advance Setting submenu *continued*

Film Mode

- Set this to **Auto**, and the projector will automatically detect:

  3:2 pulldown for 60Hz signals
  2:2 pulldown for 50Hz signals

- Set this to **Off**, to disable automatic pulldown detection.

Noise Reduction

- Select a **Noise Reduction** level as required.

Dynamic Black

- Set this to **On** or **Off** as required.

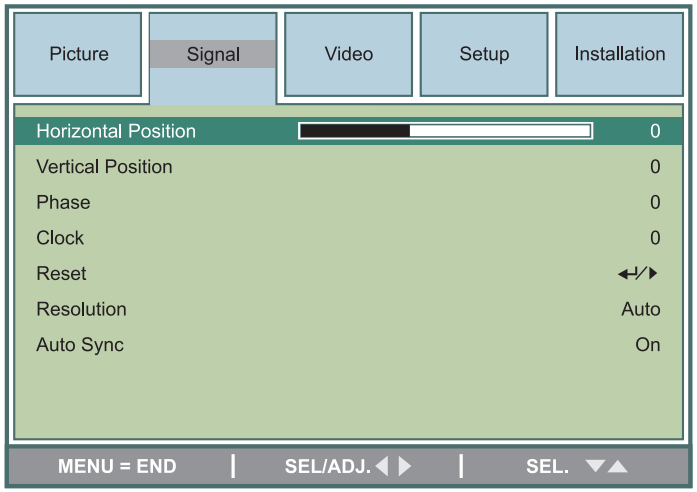
Notes

The Film Mode setting is available only for interlaced signals on the Video or S-Video inputs.

Dynamic Black reduces the overall light output for images that contain a lot of black. This improves the perceived contrast ratio.

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Signal menu



Horizontal and Vertical Position, Phase, Clock

- Adjust the sliders for these settings, as required.

Reset

- Press **ENTER** to restore the four settings above their factory defaults.
- When the warning message appears, use ◁ or ▷ to move the green highlight to **YES** or **NO**, then press **ENTER** to confirm your selection.

Resolution

- Set this to **Auto**, unless the projector has problems selecting between **Wide** and **4:3** with some signals on the Computer 1, Computer 2 and Component inputs.

Auto Sync

- Set this to **On** if you want the projector to automatically synchronise with the input signal.
- Set this to **Off** if the settings are to be made manually, using the sliders above only.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

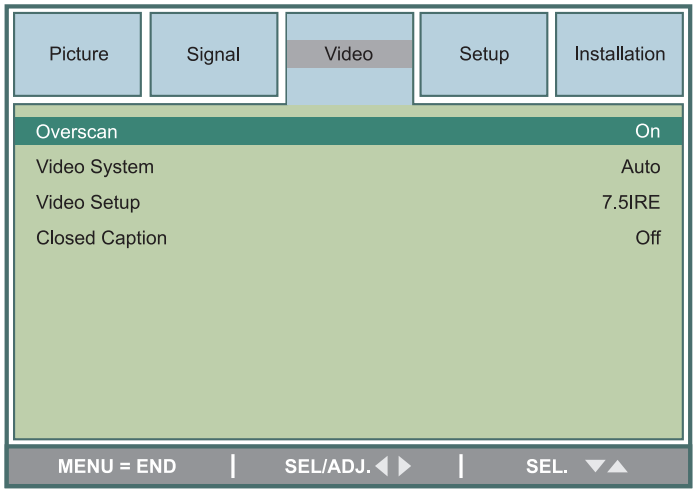
These settings are used for VGA signals only.

Do NOT do this unless you are sure that you want to restore the settings to their factory defaults.

*The **Resolution** setting is needed only for VESA 1024x768_ 60, VESA 1280x768_60, VESA 1400x1050_60 and VESA 1680x1050_60 signals on the Computer 1, Computer 2 and Component inputs.*

*The **Auto Sync** setting is used for VGA signals only.*

Video menu



Overscan

- Set this to **On** or **Off** as required.

Video System

- Set this to **Auto**, unless the projector has problems selecting between **PAL**, **SECAM**, **NTSC4.43**, **NTSC3.58**, **PAL-M**, **PAL-N** and **PAL-60**.

Video Setup

- Set this to **0IRE** or **7.5IRE** as required.

Closed Caption

- Set this to **Off** or **CC1** as required.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Overscan is used to compensate for noisy or badly defined image edges, by increasing the size of the image, to force the edges off-screen.

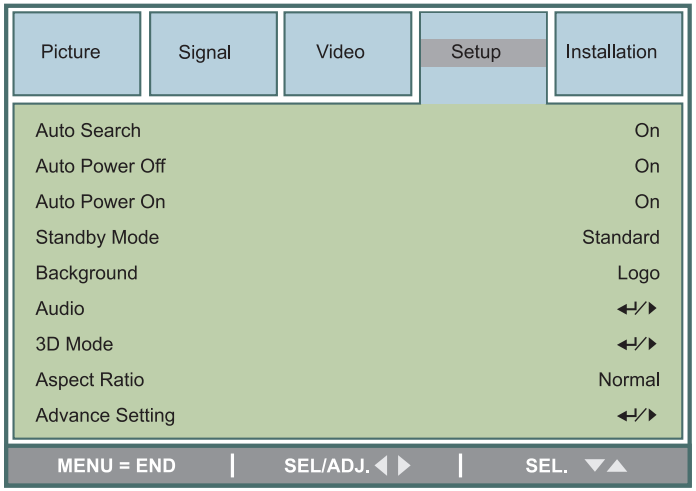
*It is always **On** for the Video and S-Video inputs, and for 480i and 576i signals.*

The Video System setting is available only for signals on the Video and S-Video inputs.

The Video Setup setting is available only for 480i signals on the Computer 1, Computer 2 and Component inputs, and NTSC3.58 signals on the Video and S-Video inputs.

Closed Captions are recognised only with NTSC3.58 signals on the Video and S-Video inputs.

Setup menu



Auto Search

- When this is set to **On**, the projector will search for an alternative input source when the current input source is disconnected
- When this is set to **Off**, the projector will show the 'background' screen when the current input source is disconnected.

Auto Power Off

- Set this to **On**, if you want the projector to go into **Standby mode** when no input source is detected for 20 minutes.

Auto Power On

- Set this to **On**, if you want the projector to start up immediately when the mains is connected.
- Set this to **Off**, if you want the projector to go into **Standby mode** when the mains is connected. In this case, the projector will not start up until the **POWER** button is pressed on the control panel or the remote control.

Standby Mode

- Set this to **Standard** or **Eco** as required.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

To set the background screen, see the next page.

*When Standby Mode is set to **Eco**:*

*the **Monitor Out** signal is disabled,*

*and the RS232 connection is disabled, so it will not be possible to turn the projector **On** remotely, except via the LAN connection.*

Setup menu *continued*

Background

- Set this to determine what appears on screen when the projector is searching for a valid input source.

Audio

- Use the Audio Submenu to turn the speakers **On** and **Off**, and set the **Volume**.

3D Mode

- Use the 3D Mode Submenu to turn the ***DLPLink*** synchronisation signal **On** and **Off**, and to **invert** the signal if necessary.

Aspect Ratio

- Select from **Normal**, **Full**, **4:3**, **16:9**, and **Native**, as follows:
  - **Normal**: the image will be displayed at its intended aspect ratio, filling either the full height or width of the screen as appropriate.
  - **Full**: the image will fill the height and width of the screen, depending on the resolution of the projector.
  - **4:3**: the image will be displayed with a 4:3 aspect ratio, fitting the full height and/or width of the screen, depending on the resolution of the projector.
  - **16:9**: the image will be displayed with a 16:9 aspect ratio, fitting the full height and/or width of the screen, depending on the resolution of the projector.
  - **Native**: the image will be displayed pixel for pixel with no scaling. This could be smaller than full screen or cropped to full screen, depending on the resolutions of the image and projector.

Notes

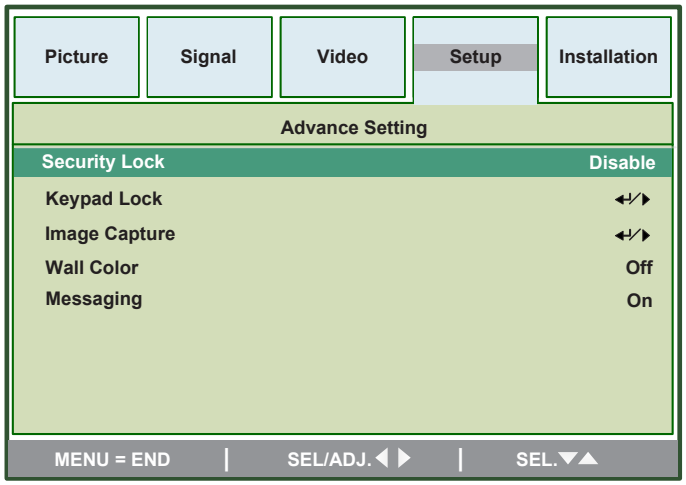
To set a background image to be displayed when **Custom** *is chosen, see the* ***Advanced Setting Submenu*** *on the next page.*

The full height and width of the screen will depend on the projector model. For more information, see the ***Specification leaflet****, or the* ***Important Information****.*

See also ***Using the Menus****, earlier in this guide and* ***Menu Map****, later in this guide.*

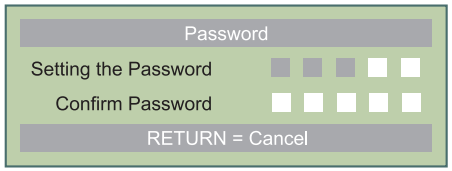
Setup menu *continued*

Advance Setting submenu



Security Lock

- When the Security Lock is enabled, a security **Password** will need to entered before the projector can be used, or before the lock can be **Disabled**.
- When setting the lock for the first time, the **Password** will need to be entered twice, to ensure that it has been entered correctly.



Keypad Lock

- To **lock** the control panel keys, use ◁ or ▷ to move the green highlight to **YES** or **NO**, then press **ENTER** to confirm your selection.
- To **unlock** the keys, press ▽ and hold for 5 seconds.

Image Capture

- To capture the current screen image for use as the **Custom** background, use **Save Image**. This will take approximately 2 minutes.
- To delete the currently saved image, use **Delete**.

Wall Color

- Set this to suit the projection screen.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Setup Menu
Advance Setting Submenu

*The **Password** is made of a combination of five presses on the ◁, ▷, △ and ▽ keys.*

Image Capture is available only:

- for Component, Computer 1, Computer 2 and Computer 3 inputs;

*- when Aspect Ratio is set to **Normal**;*

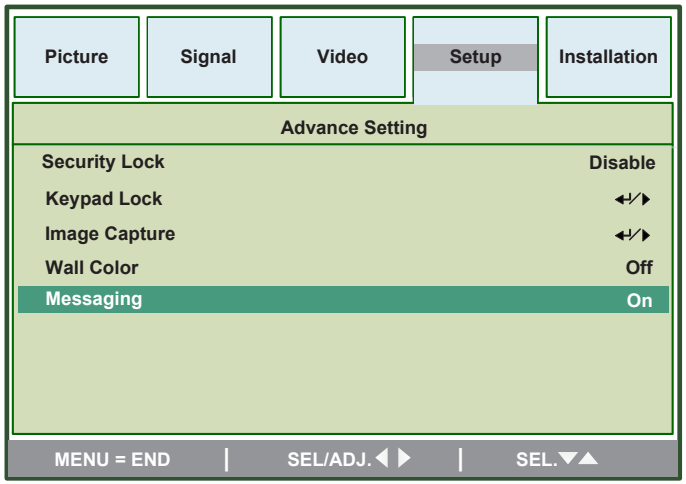
- for native resolution images: (1280x800 for E-Vision WXGA, 1024x768 for E-Vision XGA)

There are two storage locations: one for the 4 segment color wheel and one for 6 segment color wheel.

If you change wheels you will need to recapture the image. If you change back, the image for the first wheel will still be in memory.

Setup menu Advance Setting submenu *continued*

Messaging



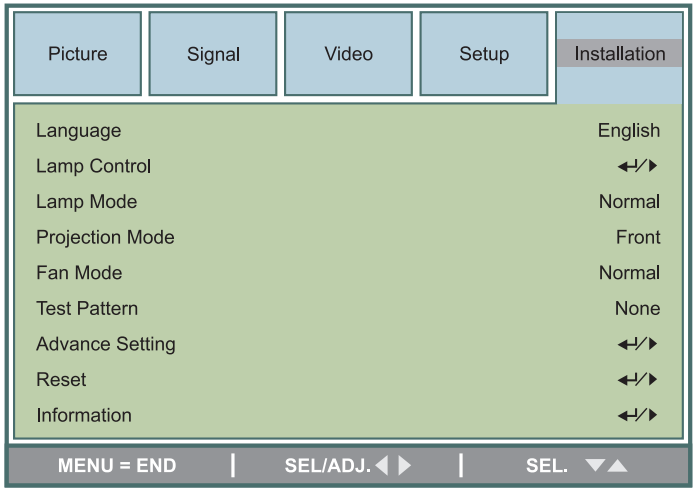
- Set **Messaging** to **Off** is you do not want projector status messages to be displayed.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Setup Menu
Advance Setting Submenu

Installation menu



Language

- Select a language as required.

Lamp Control

- Set this to **Both**, **Lamp1**, **Lamp 2** or **Auto 1** as required.

Lamp Mode

- Set this to **Normal** or **Eco** as required.

Projection Mode

- Set this to **Front**, **Rear**, **Ceiling+Front** or **Ceiling+Rear** as required.

Fan Mode

- Set this to **Normal** or **High** speed as required.

Test Pattern

- Select a Test Pattern from the list.

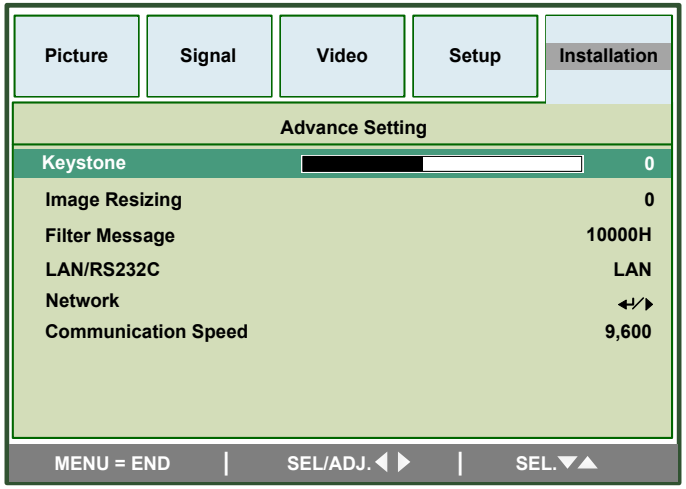
Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

*When Lamp Control is set to **Auto 1**, the projector will turn on using the lamp with the least hours of use.*

Installation menu *continued*

Advance Setting



Keystone

- Set the slider to correct for any vertical keystone distortion.

Image Resizing

- Set this to correct for any image distortion when keystone correction is being used.

Filter Message

- Select a Filter Message **time interval** from the list, or select **Off**.

LAN/RS232C

- Select from **LAN** or **RS232C** as the remote connection used for external control of the projector.

Communication Speed

- Sets the Serial Port (RS232) baud rate. Longer cable connections may require lower speeds.

Notes

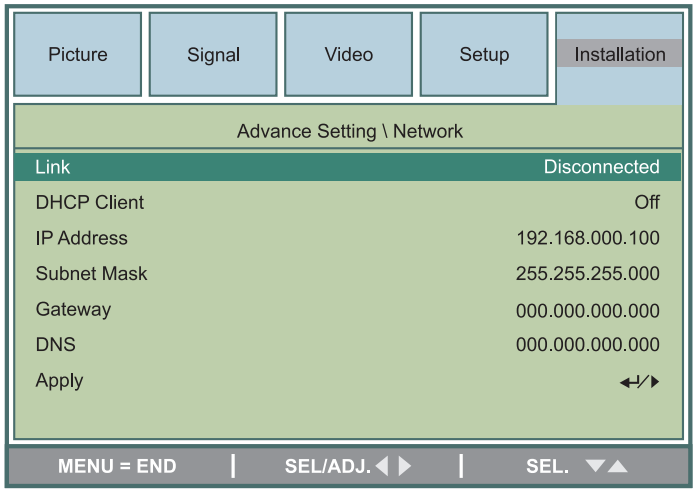
*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Installation Menu
Advance Setting submenu

Only one remote connection can be used at any one time.

Installation menu, Advance Setting submenu *continued*

Network



Link

- For information only: reports whether the projector detects a physical LAN connection. The LAN settings below should be made manually.

DHCP Client

- Set DHCP Client to **On** if the IP Address is to be assigned by a DHCP server, or **Off** if it is to be set here.

IP Address, Subnet Mask, Gateway and DNS

- If DHCP is set to **Off**:
  - Edit the settings as required.

Apply

- Press **ENTER** to apply the address settings.
- When the warning message appears, use ◁ or ▷ to move the green highlight to **YES** or **NO**, then press **ENTER** to confirm your selection.

Notes

*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Installation Menu
Advance Setting \ Network submenu

*If **DHCP** is set to **On**, it will not be possible to edit the address settings.*

Installation menu *continued*

Reset

All Reset

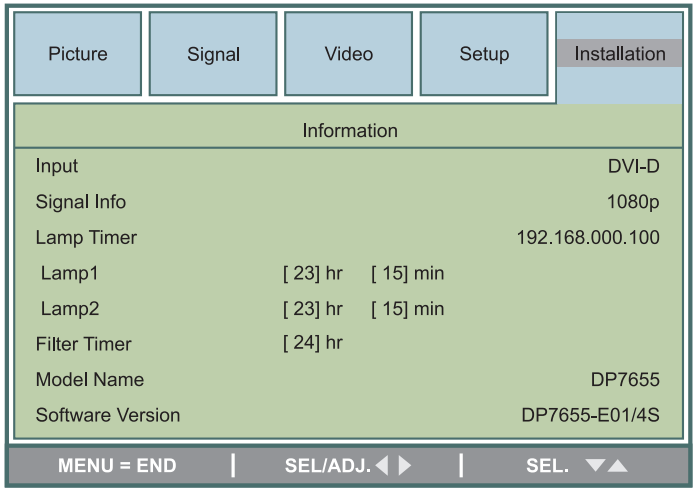
- Projector will ask for confirmation before restoring all settings to factory defaults.
- When the warning message appears, use ◁ or ▷ to select **YES** or **NO**, then press **ENTER/SELECT** to confirm your selection.

Filter Timer Reset

- Projector will ask for confirmation before resetting the timer to zero.
- When the warning message appears, use ◁ or ▷ to select **YES** or **NO**, then press **ENTER/SELECT** to confirm your selection.

Information

- The final submenu gives information about the projector, eg:



Notes

Do NOT do this unless you are sure that you want to restore ALL settings to their factory defaults.

Do NOT do this unless you are sure that you want to reset the Filter Timer to zero.

Installation Menu
Information submenu

Menu Map

Menu	*Submenus and controls*
PICTURE	
	Picture Mode *Standard, Game, Movie, Presentation*
	BrilliantColor *0, 1, 2*
	Brightness
	Contrast
	Color
	Tint
	Sharpness
	Advanced Setting
	Signal Type *Auto, RGB, YCrCb, YPrPb*
	Color Temperature *Standard, Cold, Warm*
	Red
	Blue
	Color Manager *Hue, Saturation and Value settings for: Red, Green, Blue, Cyan, Magenta and Yellow*
	Film Mode
	Noise Reduction *Off, Level 1, Level 2, Level 3*
	Dynamic Black *On, Off*
	Reset *Projector will ask for confirmation before restoring all settings in this menu (except Picture Mode and Signal Type) to factory defaults.*
SIGNAL	
	Horizontal Position
	Vertical Position
	Phase
	Clock
	Reset *Projector will ask for confirmation before restoring the four settings above to factory defaults.*
	Resolution *Auto, Wide, 4:3*
	Auto Sync *On, Off*

Notes

Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Where it would be helpful, some menu options are described in more detail earlier in this operating guide.

Menu	*Submenus and controls*
VIDEO	
	Overscan *On, Off*
	Video System *Auto, PAL, SECAM, NTSC4.43, NTSC3.58, PAL-M, PAL-N, PAL-60*
	Video Setup *0IRE, 7.5IRE*
	Closed Caption *Off, CC1*
SETUP	
	Auto Search *On, Off*
	Auto Power Off *On, Off*
	Auto Power On *On, Off*
	Standby Mode *Standard, Eco*
	Background *Logo, Custom, Blue, None*
	Audio *Volume, On, Off*
	3D Mode
	DLP®Link™ *On, Off*
	DLP®Link™ *Invert*
	Aspect Ratio *Normal, Full, 4:3, 16:9, Native*
	Advance Setting
	Security Lock *Disable, Password*
	Keypad Lock *Yes, No*
	Image Capture *Save image, Delete image*
	Wall Color *Off, Whiteboard, Blackboard*
	Messaging On, Off

Notes

Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Where it would be helpful, some menu options are described in more detail earlier in this operating guide.

Menu	*Submenus and controls*

INSTALLATION

Language *Select from list*

Lamp Control *Both, Lamp 1, Lamp 2, Auto 1*

Lamp Mode *Normal, Eco*

Projection Mode *Front, Rear, Ceiling and Rear, Front and Rear*

Fan Mode *Normal, High*

Test Pattern *None, RGB Ramps, Color Bars, Step Bars, Checkboard, Grid, Horizontal Lines, Vertical Lines, Diagonal lines, Horizontal Ramp, Vertical Ramp, White*

Advance Setting

- Keystone
- Image Resizing
- Filter Message *100H, 200H, 500H, Off*
- LAN/RS232C *LAN, RS232C*
- Network *Link, DHP Client On/Off, IP Address, Subnet Mask, Gateway, DNS*
- Communication Speed *38,400, 19,200, 9,600*
- Apply *Projector will ask for confirmation before applying the above changes*

Reset

- All Reset *Projector will ask for confirmation before restoring all settings to factory defaults*
- Filter Timer Reset *Projector will ask for confirmation before resetting the timer to zero*

Information *Input, Signal Info, Lamp 1 Timer, Lamp 2 Timer, Filter Timer, Model Name, Software Version*

Notes

Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.

Some menu options and controls may not be available due to settings in other menus. These will be shaded grey on the actual menu.

Where it would be helpful, some menu options are described in more detail earlier in this operating guide.

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DIGITAL PROJECTION

REMOTE COMMUNICATIONS GUIDE

E-Vision 7000 Series

High Brightness Digital Video Projector

Rev C July 2014

112-461C

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Introduction

The projector can be controlled by using an external control system in three different ways:

- All of the projector's features can be controlled via a serial connection, using the control strings described in this guide.

- All of the projector's features can be controlled via a LAN connection, using the industry standard ***PJLink*** commands.

*For more information about this, see **PJLink** later in this guide.*

- A number of basic picture and input settings can be controlled directly using the embedded LAN Control utility.

*For more information about this, see **LAN Control Utility** later in this guide.*

Notes

*Details of how to connect to the projector using the LAN or RS232 input, can be found in the **Connections Guide**.*

RS232 Control Commands

There are 2 types of command, ***Get commands*** and ***Set commands***. The individual commands are described later in this guide. All commands consist of ascii text strings ending wit an ascii carriage return character.

- Set commands: <header code> S <command> [CR]
- Set commands wit data <header code> S <command> <data> [CR]
- Get commands: <header code> G <command> [CR]

The projector sends a reply string to each command.

Header code

The header code, comprises the following three ascii characters:

ascii: V99

hex: 56 39 39

Examples

Set Power On:

ascii:	V99 S 0001 [CR]	projector return result in ascii:	P
hex:	56 39 39 53 30 30 30 31 0D	projector return result in hex:	50

Set brightness to 25:

ascii:	V99 S 0101 25 [CR]	projector return result in ascii:	P
hex:	56 39 39 53 30 31 30 31 32 35 0D	projector return result in hex:	50

Get brightness (brightness is 18 in this example):

ascii:	V99 G 0101 [CR]	projector return result in ascii:	P 18
hex:	56 39 39 47 30 31 30 31 0D	projector return result in hex:	50 31 38

Notes

Serial port settings:

Baud rate	*9,600 bps*
Data length	*8 bits*
Stop bits	*one*
Parity	*none*
Flow control	*none*

*The **Communication speed** (baud rate) can be adjusted. For details, see the **Operating Guide**.*

Spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Return Result Strings:

'P' is returned for a successful Set command;

'Pn' is returned for a successful Get command;

'F' is returned for a failed command.

The commands

The commands are divided into five groups, the group number forming the first two characters of the command.

Command Group 00

Ascii	*Hex*	*Function*	*Description*	*Return String*
V99S0001	56 39 39 53 30 30 30 31 0D	Power On		P/F
V99S0002	56 39 39 53 30 30 30 32 0D	Power Off		P/F
V99S0003	56 39 39 53 30 30 30 33 0D	Resync		P/F
V99G0004	56 39 39 47 30 30 30 34 0D	Get Lamp1 Hours		Pn/F
V99G0005	56 39 39 47 30 30 30 35 0D	Get Air filter timer	n=0~999999	Pn/F
V99S0006	56 39 39 53 30 30 30 36 0D	System Reset		P/F
V99G0007	56 39 39 47 30 30 30 37 0D	Get System Status	0: Reset 1: Standby 2: Operation 3: Cooling	Pn/F
V99G0008	56 39 39 47 30 30 30 38 0D	Get F/W Version		Pn/F
V99G0010	56 39 39 47 30 30 31 30 0D	Get Lamp2 Hours		Pn/F

Command Group 01

Ascii	*Hex*	*Function*	*Description*	*Return String*
V99G0101	56 39 39 47 30 31 30 31 0D	Get Brightness	n= -30~30	Pn/F
V99S0101n	56 39 39 53 30 31 30 31 n 0D	Set Brightness	n= -30~30	P/F
V99G0102	56 39 39 47 30 31 30 32 0D	Get Contrast	n= -30~30	Pn/F
V99S0102n	56 39 39 53 30 31 30 32 n 0D	Set Contrast	n= -30~30	P/F
V99G0103	56 39 39 47 30 31 30 33 0D	Get Color	n= -30~30	Pn/F
V99S0103n	56 39 39 53 30 31 30 33 n 0D	Set Color	n= -30~30	P/F
V99G0104	56 39 39 47 30 31 30 34 0D	Get Tint	n= -30~30	Pn/F
V99S0104n	56 39 39 53 30 31 30 34 n 0D	Set Tint	n= -30~30	P/F
V99G0105	56 39 39 47 30 31 30 35 0D	Get Sharpness	n= -30~30	Pn/F
V99S0105n	56 39 39 53 30 31 30 35 n 0D	Set Sharpness	n= -30~30	P/F

Continued

Notes

Note: spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Ascii column, the final [CR] has been omitted for clarity.

In the Command Strings and the Return Results, 'n' represents a data string.

In the Return Result Strings:

'P' is returned for a successful Set command;

'Pn' is returned for a successful Get command;

'F' is returned for a failed command.

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99G0106	56 39 39 47 30 31 30 36 0D	Get Color Temperature	0: Warm 1: Standard 2: Cold	Pn/F
V99S0106n	56 39 39 53 30 31 30 36 n 0D	Set Color Temperature	0: Warm 1: Standard 2: Cold	P/F

Command Group 02

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99S0201	56 39 39 53 30 32 30 31 0D	Select RGB		P/F
V99S0202	56 39 39 53 30 32 30 32 0D	Select BNC		P/F
V99S0203	56 39 39 53 30 32 30 33 0D	Select Component		P/F
V99S0204	56 39 39 53 30 32 30 34 0D	Select Video		P/F
V99S0205	56 39 39 53 30 32 30 35 0D	Select S-Video		P/F
V99S0206	56 39 39 53 30 32 30 36 0D	Select DVI		P/F
V99G0220	56 39 39 47 30 32 32 30 0D	Get Current Source	0: RGB 1: BNC 2: Component 3: Video 4: S-Video 5: DVI	Pn/F

Command Group 03

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99G0301	56 39 39 47 30 33 30 31 0D	Get Scaling	0: Normal 1: Full 2: 4: 3 3: 16: 9 4: Native	Pn/F
V99S0301n	56 39 39 53 30 33 30 31 n 0D	Set Scaling	0: Normal 1: Full 2: 4: 3 3 : 16:9 4 : Native	P/F

Continued

Notes

Note: spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Ascii column, the final [CR] has been omitted for clarity.

In the Command Strings and the Return Results, 'n' represents a data string.

In the Return Result Strings:

'P' is returned for a successful Set command;

'Pn' is returned for a successful Get command;

'F' is returned for a failed command.

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99G0302	56 39 39 47 30 33 30 32 0D	Get AV Mute		Pn/F
V99S0302n	56 39 39 53 30 33 30 32 n 0D	Set AV Mute		P/F
V99G0304	56 39 39 47 30 33 30 34 0D	Get Image Freeze		Pn/F
V99S0304n	56 39 39 53 30 33 30 34 n 0D	Set Image Freeze		P/F
V99G0305	56 39 39 47 30 33 30 35 0D	Get Volume	n= 0~60	Pn/F
V99S0305n	56 39 39 53 30 33 30 35 n 0D	Set Volume	n= 0~60	P/F
V99G0308	56 39 39 47 30 33 30 38 0D	Get Projection Mode	0: Front 1: Rear 2: Ceiling + Front 3: Ceiling + Rear	Pn/F
V99S0308n	56 39 39 53 30 33 30 38 n 0D	Set Projection Mode	0: Front 1: Rear 2: Ceiling + Front 3: Ceiling + Rear	P/F
V99G0309	56 39 39 47 30 33 30 39 0D	Get Vertical Keystone	n= -80~80	Pn/F
V99S0309n	56 39 39 53 30 33 30 39 n 0D	Set Vertical Keystone	n= -80~80	P/F

Command Group 04 (Remote Control buttons)

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99S0401	56 39 39 53 30 34 30 31 0D	ON		P/F
V99S0402	56 39 39 53 30 34 30 32 0D	OFF		P/F
V99S0403	56 39 39 53 30 34 30 33 0D	Focus+		P/F
V99S0404	56 39 39 53 30 34 30 34 0D	Focus-		P/F
V99S0405	56 39 39 53 30 34 30 35 0D	Zoom +		P/F
V99S0406	56 39 39 53 30 34 30 36 0D	Zoom -		P/F
V99S0407	56 39 39 53 30 34 30 37 0D	TEST Pattern		P/F
V99S0408	56 39 39 53 30 34 30 38 0D	LENS SHIFT		P/F
V99S0409	56 39 39 53 30 34 30 39 0D	UP		P/F
V99S0410	56 39 39 53 30 34 31 30 0D	DOWN		P/F

Continued

Notes

Note: spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Ascii column, the final [CR] has been omitted for clarity.

In the Command Strings and the Return Results, 'n' represents a data string.

In the Return Result Strings:

'P' is returned for a successful Set command;

'Pn' is returned for a successful Get command;

'F' is returned for a failed command.

When Standby Mode is set to **Eco***:*

the RS232 connection is disabled, so it will not be possible to turn the projector **On** *remotely, except via the LAN connection.*

ASCII	*HEX*	*Function*	*Description*	*Return String*
V99S0411	56 39 39 53 30 34 31 31 0D	LEFT		P/F
V99S0412	56 39 39 53 30 34 31 32 0D	RIGHT		P/F
V99S0413	56 39 39 53 30 34 31 33 0D	ENTER		P/F
V99S0414	56 39 39 53 30 34 31 34 0D	MENU		P/F
V99S0415	56 39 39 53 30 34 31 35 0D	RETURN		P/F
V99S0416	56 39 39 53 30 34 31 36 0D	INPUT		P/F
V99S0417	56 39 39 53 30 34 31 37 0D	PICTURE		P/F
V99S0418	56 39 39 53 30 34 31 38 0D	AVMUTE		P/F
V99S0419	56 39 39 53 30 34 31 39 0D	AUTO SYNC		P/F
V99S0420	56 39 39 53 30 34 32 30 0D	ASPECT		P/F
V99S0421	56 39 39 53 30 34 32 31 0D	VOL+		P/F
V99S0422	56 39 39 53 30 34 32 32 0D	VOL-		P/F
V99S0423	56 39 39 53 30 34 32 33 0D	OVERSCAN		P/F
V99S0424	56 39 39 53 30 34 32 34 0D	FREEZE		P/F
V99S0425	56 39 39 53 30 34 32 35 0D	3D MODE		P/F
V99S0426	56 39 39 53 30 34 32 36 0D	INFO.		P/F

Notes

Note: spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

In the Ascii column, the final [CR] has been omitted for clarity.

In the Command Strings and the Return Results, 'n' represents a data string.

In the Return Result Strings:

'P' is returned for a successful Set command;

'Pn' is returned for a successful Get command;

'F' is returned for a failed command.

PJLink

The ***LAN IP Address*** of the projector can be set by using the ***Network*** submenu, which can be found in the ***Advanced Setting*** submenu in the ***Installation*** menu.

Once the LAN IP Address has been set, it is possible to assign a ***Host Name*** and ***Domain Name*** to the projector, and to set up an ***Alert Mail*** address and ***PJLink*** password:

- Point your browser at the projector by typing the url ***http://<LAN IP Address>/lanconf.html*** into the address bar, then press the ***Enter*** key.
- The embedded webpage shown here should appear.

Settings

Host Name

Up to 60 alpha-numeric characters can be entered. Press the **Apply** button to confirm the new name.

Domain Name

Up to 60 alpha-numeric characters. Press the **Apply** button to confirm the new name.

Mail

When enabled, an email will be sent to up to three specified addresses, when the lamp reaches the end of its useable life, or if an error occurs on the projector. Press the **Apply** button to confirm the new settings.

A test mail can be sent to check that the settings have been made correctly. Press the **Execute** button to send the test message.

PJLink

When enabled, a password can be set. Press the **Apply** button to confirm the new password.

The projector supports all the commands of PJLink Class 1.

Notes

The TCP Port number is 5450.

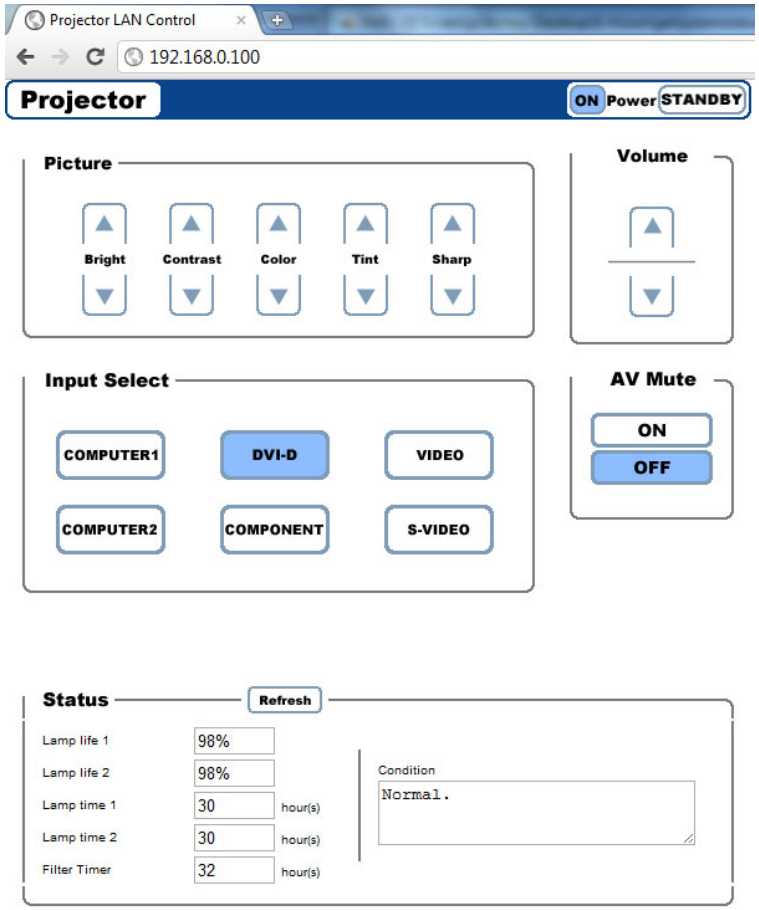
*The PJLink specification can be downloaded from **http://pjlink.jbmia.or.jp/english** - click on the **Specifications** link.*

LAN Control Utility

The ***LAN IP Address*** of the projector can be set by using the ***Network*** submenu, which can be found in the ***Advanced Setting*** submenu in the ***Installation*** menu.

Once the LAN IP Address has been set, it is possible to control some basic functions by using the emedding LAN Control Utility:

- Point your browser at the projector by typing the url ***http://<LAN IP Address>/index.html*** into the address bar, then press the ***Enter*** key.
- The embedded webpage shown here should appear.



Power ON/STANDBY

Click on the buttons to turn the projector **On** or into **Standby** mode.

Picture and Volume controls

Click on the △ and ▽ controls to adjust the settings as required.

Input Select

Click on the **Input** buttons to switch to the required input.

AV Mute

Click to switch both video and sound **On** or **Off**.

Status

The panel shows the status of the lamps and filters. Click on the **Refresh** button to update the readings.

Notes

*For full details of how to use the menu system, see the **Operating Guide**.*

The lamp life percentage shown here is based on expected lamp life in controlled laboratory conditions.

*Actual life may vary depending on installation environment, orientation and lamp mode (**Normal** or **Eco**).”*